# AUTOMOTIVE

## INDEX

TO

## VOLUME 67

July 2 to December 31, 1932

To facilitate reference this index to Volume 67 has been divided into three parts: an index to subjects, to companies, and to authors, arranged in the order named in the following pages. Thus the three common methods used in seeking any particular article have been segregated to avoid the confusion which their intermingling permits.

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Illinois gas tax collection is off 375 Maine defeats gas tax increase plan. 467 Maryland dealers fight gasoline tax diversion 726 Missouri checks length of trucks 455 M.E.M.A. to urge anti-trust changes. 810 New Jersey requires direction indicators 660 Oct. 6 set for pact approval 345 Ohio boosts workers' compensation	Milholland 4-way driller 490 Moline hole hog 490 Natco multiple operation machine 636 National Acme chaser grinder 489 National-Cleveland radial helicoid grinder 222 National multiple spindle driller 489 New equipment for machining brake drums 318 New Niagara shear cuts ½ in. x 10 ft. plates 94	33 per cent
Illinois gas tax collection is off	Milholland 4-way driller 490 Moline hole hog	33 per cent
Illinois gas tax collection is off	Milholland 4-way driller 490 Moline hole hog 490 Natco multiple operation machine 636 National Acme chaser grinder 489 National-Cleveland radial helicoid grinder 222 National multiple spindle driller 489 New equipment for machining brake drums 318 New Niagara shear cuts ¼ in. x 10 ft. plates 94 Norton surface grinding machine 472 Oscillating head of Pratt & Whitney die sinker increases production 456	33 per cent 345  O  Obituaries  Apple, Vincent G. 510 Armstrong, Robert T. 375 Barlow, A. E. 786 Be Saw, Earl William 340 Bilgram, Hugo 345 Brauns, C. K. dies 23 Brock, William S. 694 Brownell, €Gerald E. 633 Burgess George K. dies in Washing.
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Illinois gas tax collection is off	Milholland 4-way driller 490 Moline hole hog 490 Natco multiple operation machine 636 National Acme chaser grinder 489 National-Cleveland radial helicoid grinder 222 National multiple spindle driller 489 New equipment for machining brake drums 318 New Niagara shear cuts ¼ in. x 10 ft. plates 94 Norton surface grinding machine 472 Oscillating head of Pratt & Whitney die sinker increases production 456 Pratt & Whitney magazine 1 x 18" full automatic lathe 94 Producto-Matic milling machine 636 Porter-Cable carbo-lathe 483 Pratt & Whitney universal die sinker 483	33 per cent
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Illinois gas tax collection is off	Milholland 4-way driller 490 Moline hole hog 490 Natco multiple operation machine 636 National Acme chaser grinder 489 National-Cleveland radial helicoid grinder 222 National multiple spindle driller 489 New equipment for machining brake drums 318 New Niagara shear cuts ¼ in. x 10 ft. plates 472 Norton surface grinding machine 472 Oscillating head of Pratt & Whitney die sinker increases production 456 Pratt & Whitney magazine 1 x 18" full automatic lathe 487 Producto-Matic milling machine 636 Porter-Cable carbo-lathe 483 Pratt & Whitney universal die sinker 483 Precision boring machine for Bakelite canvas 442 Racine blade grinder 488 Special hydraulic feed drilling and bor-	O   Obituaries
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à	1012, Guy Horphy, Franklin, Jr. 664 Juley, Clifford H. 251 Juley, Tinius 572 1020, Tinius 572	Promoted Pierce-Arrow merchandising executive	June vehicle production in U. S. 183,-           092; Canada 7112
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ì	rkins, Sam A. 279 rkins, Sam A. 279 rlman, Louis, H. 539 teuter, Jacob, dies 118 tonmelfanger, Nicholas 251	Rockelman joins Continental Motors 371 Scott re-elected President of Novo 466	1931 production was \$865,652,968 657 October Canadian production up 25 per
2	tommelfanger, Nicholas 123 achs, Ernst 123 heffield head dies 188	Selheimer promoted by Massey-Harris 281 Sherman, Ray, resigns 151	cent
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1	Shram, F. W. 252 Sloan, Alfred P., Sr., dies at Plandome 307 Smith, Andrew J. 433	service	September production hits new low mark
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1	vestor	Thompson retires from air line 373 Walker leaves Devereaux, is now con-	10-months sales favor Ford units 785 12's and 16's gain, but 6's lead sales 297
1	Wise, Nathan A	sulting designer	U. S. production hits new low of 48,934 units
	P	Wilson now heads Constand Products 463	R
Pa	rts Descriptions-See also Aircraft	Winans is chief engineer of Federal 118 Earl W. Winans, Federal's engineer 150 Wood, J. Kaye, elected	Rail cars Auto Tram seats 42, weighs 26,000 lb.
	Parts Ball-Bearing Pedestal	Pistons	net
	Chrysler adopts needle-bearing univer- sal joints 232	Alloy ring carrier cast in light piston	Irish rall car powered with Drumm zinc-nickel battery 449
	Clark Equipment offers low pressure spoke wheel	resists wear, Diesel tests show 747 Lynite T-slot piston developed for en-	Pneumatic-tired rail car seats 47 580 Streamline cars tempt railroads 57
	Electric, double-acting fuel nump by	Perfect Circle piston expander is revolu-	Twin Coach develops rail-highway unit 634
3	Stewart-Warner	tionary in design	Registrations, Motors Vehicles—See also Aviation, Motor Boats, Motorcycles
1	by Walker	pany product	Canadian registrations show 7.8 per
	Gasket material developed by G. D.	AC remodeling its two plants 374	Commercial car, truck registrations gain
	laboratory	Allis-Chalmers will spend \$203,000 691 Amplex expands plant facilities 634	Early sales data indicate upturn 85 Farmers are leading motor vehicle
	No-Ro-Shox self-adjusting bearing for drag links	Canadian Raybestos building additions 408 Canadian Raybestos making additions 404	users
1	Parker-Kalon new forged wing nuts 318 Plymouth six has new type of needle	Contracts let on new Ford plant 568 Cummins Diesel Co. expands plant size 185	G. M. July sales reach 32,849
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0	A. P. I. elects Ames as 1933 president 690	Seat cover maker in enlarged plant 787	Italian truck highway program is launched
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## AUTOMOBILE

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THE PYROMETER REGISTERED



yet the lining was still in excellent condition



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